

# NIOS

## Content Analysis

Programme Name: **RURAL TECHNOLOGY**

Course Name: OUR HOME ENVIRNMENT (455)

SECTION - A

Unit Number- 6, Unit Name – **FOOD PRESERVATION**

Sub Unit Number- 6.4, Sub Unit Name - PRESERVATION METHODS

Sr. No.	Topic	Sub topic	Concept/terms/processes/approaches/system/subsystems/definition/ procedure/structure etc	Learning activities	Objectives/Knowledge/applica tion/skills/competencies/capa cities/capabilities/values to be developed / Learning outcome	OERs (Type and Name)	Concept Map of the OER	Facilitators role
1	FOOD PRESERVATION	Preservation method	A) <u>Concept</u> – food preservation <u>Processes</u> – Thermal processing (Heating ) <u>TERMS</u> – Enzymes, micro organisms, blanching, pasteurization.	1. Searching 2. Check Availability of raw material 3. Economics (budgeting & estimating) 4. Purchasing 5. Processing 6. Marketing	<u>Objectives</u> - # Understand the importance of food preservation. # Realize the causes of food spoilage. # Learn different methods of food preservation. <u>Knowledge</u> – 1. Food items can be preserved. 2. Nutrients are not affected. <u>Values</u> - Hygiene is important in food products. <u>Skills</u> –1. Using a thermometer. 2. Handling castles. <u>Learning Objectives</u> – 1. Jam 2. Jelly 3. Sauces 4. Ketchup 5. Drying of vegetable 6. Khoa 7. Nankatai	Computer, Internet, Text, video, Ppt.	Heating – temperature	To guide, To support. To find out ways for tackle problems
			1. Cold processing 2. Drying 3. Use of microwave 4. Addition of chemicals 5. Atmosphere composition		1. Pickles 2. Squashes 3. Candies 4. Juices 5. Chutney's 6. Chikki			
			Preservatives, radiations, canning of food, sterilization, perishable, semi perishable, and shelf stable food.					

SECTION - A

Unit Number- 8                      Unit Name- Knitting

Sub Unit Number- 8.3, 8.4                      Sub Unit Name - needles, stitches

Sr. No.	Topic	Sub topic	Concept/terms/processes/approaches/system/subsystem/ definition/procedure/structure etc	Learning activities	Objectives/Knowledge/application/skills/ competencies/capacities/capabilities/values to be developed	OERs (Type and Name)	Concept Map of the OER	Facilitators role
1.	knitting	Needle	Definition – Needle - Make up of aluminum, wood & bamboo can do by combining knit & purl stitches.	1. Learn about wool. 2. Learn about patterns with help of needles.	Objective- 1. Know about needles. 2. Requirement of knit stitch. 3. Understand the methods of purl stitches.		Videos, internet sessions	Link with experts & guidance.
2.	“	stitches	Concept - stitches Term - yarn	1.about yarn 2.sizes & types of needles 3. Scissor operation.	1. Students learn knit stitch 2. Students learn Purl stitch		“	“

SECTION – A

Unit Number- 1                      Unit Name - Human Body

Sub unit Number- 1.3, 1.5                      Sub Unit Name - Anatomy & Physiology, Important systems of human body

Sr. No.	Topic	Sub topic	Concept/terms/processes/approaches/system/subsystem/ definition/procedure/structure etc	Learning activities	Objectives/Knowledge/application/skills/compe tencies/capacities/capabilities/values to be developed	OERs (Type and Name)	Concept Map of the OER	Facilitators role
1.	Human body	Anatomy & Physiology	Definition – Anatomy means to study of normal structure, shape, size,& location of various parts of the body. Physiology means functions of various organs of the body.	Observe u r friends to know the difference of anatomy & physiology.	Objectives-1.the knowledge of structure & functions of healthy body. 2. Understand the meaning of anatomy & physiology. 3. Know the important systems of human body. 4. Functions & contribution of each system.	Ppt. , Video , Internet	Videos, doctor’s session.	Link with experts & guidance.
2.	Human body	Important systems	Concept - human body Terms - cell, tissues, organ, systems. Systems-Name & definition of nine systems.	Draw a body structure & discuss how they work with each other?	Knowledge - how body works & different parts of body. Values - how the parts cooperate with each other & do their work. Interrelationship between all body parts.	Ppt. , charts	“	“

SECTION – A

Unit Number- 2                      Unit Name - Health & Hygiene

Sub unit Number - 2.3, 2.4, 2.5, 2.6, 2.7                      Sub Unit Name - Health, Hygiene, Personal Hygiene, environment hygiene, food hygiene

Sr. No.	Topic	Sub topic	Concept/terms/processes/approaches/system/subsystem s/definition/procedure/structure etc	Learning activities	Objectives/Knowledge/application/skills/competencies/ capacities/capabilities/values to be developed	OERs (Type and Name)	Concept Map of the OER	Facilitators role
1.	Health & Hygiene	What is health	Definition-The body and the mind is in harmony and in proper functioning balance with every other part Aspects- Physical health, Mental health, Emotional health and Spiritual health		Objectives- 1. Know the meaning of health. 2. Understand the importance of Physical, Mental and Spiritual health.		Videos, doctor’s session.	Link with experts & guidance.
2.	Health & Hygiene	Hygiene	Definition- Hygiene means science and art of preserving and improving health and to allow man to live in healthy relationship with environment. Aspects - personal environment and food.		Objective – Meaning and importance of hygiene, necessity of personal , environmental and food hygiene “		“	“
3.	Health & Hygiene	Personal Hygiene	Definition –Hygiene - It means cleanliness of our body. Aspects - Cleanliness, proper sleep, food, water, exercise, work and care of vulnerable parts of body	Observe your five friends and discuss	Knowledge - toothbrush, comb, towel, soap, nail cutter, handkerchief keep clean.		“	“
4.	Health & Hygiene	Environment hygiene	Approach - Health education of the masses helps to develop an interest in the environmental sanitation Aspects - Water pollution, air pollution, sanitation		Knowledge - To know what type of diseases spreads if water is polluted. To understand the importance of sanitation			
5.	Health & Hygiene	Food Hygiene	Definition - If hygiene is ignored or overlooked while buying, preparing, cooking and storing food. The consequences in terms of food poisoning can be sudden and severe.		Knowledge - Keep kitchen clean, cleanliness during preparation of food, cleaning of refrigerator, clean water, and clean storage of food.			

SECTION - A

Unit Number- 3                      Unit Name -   Nutrients

Sub unit Number-3.3, 3.4, 3.6                      Sub Unit Name –Food & Nutrition, Nutrition & Nutrients, Deficiency diseases

Sr.	Topic	Sub topic	Concept/terms/processes/approaches/system/subsystems / definition/procedure/structure etc	Learning activities	Objectives/Knowledge/application/skills/competencies/capacities/capabilities/values to be developed	OERs (Type and Name)	Concept Map of the OER	Facilitators role
1.	Nutrition	Food & Nutrition	Terms - Food, Nutrition Functions- 1. Essential for the growth of human body 2. Provides power to the body to resist diseases. 3. Provides energy for production of heat & for maintenance of all metabolic activities. 4. Essential for daily wear & tear.		Objective- 1. Definition & functions of food. 2. To know what is nutrition & different nutrients. 3. Understand the importance of balance diet. 4. Various deficiency diseases & their dietary treatment.		Videos, doctor’s session.	Link with experts & guidance.
2.	Nutrition	Nutrition & nutrients	Definition: Nutrition means the process, by which the body ingests digests, absorbs, transports, & utilizes the nutrients. Nutrients are the constituents of food that must be supplied to the body in suitable amounts. Important nutrients -carbohydrates, minerals, proteins, water, fats, roughages, vitamins etc.	With the help consultant make a chart of nutrients their types, sources, functions, deficiency.	Knowledge- 1. to understands the importance of food. 2. Different food gives us different nutrients. 3. Dietary management of some deficiency diseases.		“	“
3	Nutrition	Deficiency diseases	Definition: A deficiency disease is a condition in which a particular nutrient has been inadequate or missing from our daily meals for a prolonged period.	Make a chart of diseases, symptoms & their dietary treatment.	Knowledge-our diet must conation all the food groups in correct proportion.		“	“

SECTION - A

Unit Number- 4      Unit Name - Diseases

Sub unit Number - 4.3, 4.4, 4.5      Sub Unit Name –what is diseases, HIV/AIDS, vaccination

Sr.	Topic	Sub topic	Concept/terms/processes/approaches/system/subsystems /definition/procedure/structure etc	Learning activities	Objectives/Knowledge/application/skills/competencies/capacities/capabilities/values to be developed	OERs (Type and Name)	Concept Map of the OER	Facilitators role
1.	Diseases	Meaning of diseases	Definition- a disease is a abnormal condition of an organism that impairs bodily functions, associated with specific symptoms & signs. Classification-Air borne, water borne, food borne, insect borne.		Objectives-to understand the diseases & classification. To know some common diseases, their symptoms, treatments & prevention. To know the importance of vaccination.		Videos, doctor’s session.	Link with experts & guidance.
2.	Diseases	HIV/aids	Terms-HIV (human immunodeficiency virus). AIDS(acquired immune deficiency syndrome)		Knowledge- HIV transmission: 1.by transfusion of infected blood or blood products. 2. Having unprotected sex with HIV infected person. 3. by infected needles, syringes and other instruments. 4. by an infected mother by her unborn child.		“	“
3	Diseases	Vaccination	Definition-A vaccine is a biological preparation that improves immunity to a particular disease. Methods-oral, by injection, puncture, transversal .	Go to the hospitals & observe how the nurse vaccine patient	Knowledge-how diseases transmitted from one person to another. To know about some common diseases, their causative agents, symptoms & preventive measures. to know about HIV/AIDS, modes of transmission, preventive measures & anti retroviral therapy (art).		“	“

SECTION - A

Unit Number- 5 Unit Name -First Aid

Sub unit Number-5.3, 5.4, and 5.5. Sub Unit Name –first aid, first aid management, first aid kit

Sr.	Topic	Sub topic	Concept/terms/processes/approaches/system/subsystems/definition/procedure/structure etc	Learning activities	Objectives/Knowledge/application/skills/competencies/capacities/capabilities/values to be developed	OERs (Type and Name)	Concept Map of the OER	Facilitators role
1.	first aid	First aid	Definition- The immediate treatment that is given to the victim of an accident or sudden illness before any medical help arrives is called “first aid”. Aim- 1. It saves life. 2. Helps in early recovery. 3. Prevent worsening of the victim’s condition. 4. To reduce pain & sufferings.		Knowledge-1.be calm. 2. Disperse the crowd. 3. Move the victim in a suitable safe place. 4. give artificial respiration. 5. call for a medical help. Objectives-1.understand the concept of first aid. 2. Learn about different procedures & practice of giving first aid. 3. Provide first aid to the victim in case of any emergency & save life.		Videos, doctor’s session.	Link with experts & guidance.
2.	first aid	First aid management	Approaches- 1. Excessive bleeding. 2. Fracture. 3. Electrical shock. 4. Burn. 5. Bites & stings. 6. Swallowing objects & choking. 7. Poisoning.	All the procedures in first aid during different type of emergencies along with other school mates.	Knowledge-emergency care is required at any time in life and first aid provided at right time not only saves life but also prevents gross damage of essential parts of the body.		“	“
3.	First aid	First aid kit	Terms- Bandage, cotton, dettol, small scissors, safety pins, burnol, torch, hot water bottle.		Values-how save somebody life, life is important.			

Unit Number- 6 Unit Name -Yoga and Exercise

Sub unit Number-6.3, 6.4, 6.5, and 6.7. Sub Unit Name –What is Yoga, Ash tang Yoga, Asana, Pranayam,

3.	Yoga exercise	Asana	Approaches-we follow YAM & NIYAM & change our habits, way of life, our thoughts & emotions & purify ourselves inside out & then starts doing the ASANS. Terms-SUKHASAN, PADMASAN, VAJARASAN, SARVANGASAN, DHANURASAN, SHALABHASAN, BHUJANGASAN, PWANMUKTASAN, MANDUKASAN, SHAVASAN, SURYANAMASKAR.		Rules-1.morning & in the evening during the empty stomach. 2. General yogasanas should be practiced before taking meals. 3. The body & mind should be in a restful & normal condition. 4. One should do yoga at the same time every day. 5. The place of practice should be neat, clean, airy & well ventilated. 6. One should practice yoga on floor, avoid bed. 7. Wear light, loose & cotton cloths. 8. Maintain silence while doing yoga. 9. Always breathe through the nose while doing asana.			
4.	Yoga exercise	pranayam	Definition-pranayam is yogic art of breathing. Approaches-SURYABHEDI, NADISHODHAN, UJJAYI, SHITKARI, SHITALI, BRAHMARI, BHASTRIKA, KAPALBHATI.		Benefits-to control emotions. It keeps the lungs pure. It purifies blood and improves blood circulation & removes sluggishness. It increases vigor, vitality, memory & perception. It cleans the organs, senses, mind, intellect & ego. Knowledge-as the bathing is essential for purifying the body, similarly pranayam is necessary for purifying the mind.		.	

SECTION - A

Unit Number- 7      Unit Name - Lab arrangement & safety precaution

Sub unit Number-7.3, 7.4, 7.5, 7.6, and 7.7.      Sub Unit Name – lab arrangement & set up, electricity supply, water supply, behavior of technician, disinfection of lab

Sr.	Topic	Sub topic	Concept/terms/processes/approaches/system/subsystems/definition/procedure/structure etc	Learning activities	Objectives/Knowledge/application/skills/competencies/capacities/capabilities/values to be developed	OERs (Type and Name)	Concept Map of the OER	Facilitators role
1.	Lab arrangement & safety precaution	Lab arrangement & set up	System-clean & good laboratory facilities are necessary. The lab should be airy & with big windows to get natural light. The wall should be painted with white or light colour. Laboratory sinks should be washable for glass wears. The lab should have attached toilet.	Visit a pathology lab in ur town & observe the arrangements & set up in the lab.	Objectives- laboratory arrangement & set up. Electric supply, water supply, behavior of technician, Various ways of disinfection in lab.			
2.	Lab arrangement & safety precaution	Electricity supply	Terms-centrifuge, refrigerator, hot water bath & sterilizer	“	Objective-the electricity supply plays an important role in the lab. It would be three phase connection with proper earthing. Regular check up of electric instruments for shock help to avoid any accidents.			
3.	Lab arrangement & safety precaution	Water supply	Concept-lab arrangement & safety precaution	“	Knowledge-the lab needs water for cleaning & washing of glass wear. It would be through tap up to wash basin. It would be from municipal council or supplied with overhead supply tank. It would be proper disposal facility & used water for washing. Waste water from lab would be collected in soak pit which would be absorbed in the soil.			
4.	Lab arrangement & safety precaution	Behavior of technician		“	Duties-punctuality at work place is imp. Neatness clean clothes & lab coat is imp. Arranging the glass wear, needles, and chemical bottles at proper place is very imp. Wash the hands after completing the tests. Honesty & clean practice while carrying out test is very imp.			
5.	Lab arrangement & safety precaution	Disinfection of lab	Ways –with boiling water, heating with spirit lab, with pressure cooker, by incineration, needles.	Take an interview of the technician on do’s & don’t of the technician disinfection in the lab.				

SECTION - A

Unit Number- 9                      Unit Name - **Housing**

Sub Unit Number- 9.3, 9.4, 9.5                      Sub Unit Name - Functions of home, Home environment    care Maintenance of home

Sr.	Topic	Sub topic	Concept/terms/processes/approaches/system/subsystems/definition/procedure/structure etc	Learning activities	Objectives/Knowledge/application/skills/competencies/capacities/capabilities/values to be developed	OERs (Type and Name)	Concept Map of the OER	Facilitators role
1.	Housing	Functions of home	Approaches-protective, economic, religious, educative, social, affection, status giving. Definition-house, home	How many types of material used to make house? Compare urban houses & rural houses?	Objective- 1. State the functions of home. Knowledge- 1. How best can u utilize space in a house?			
2.	“	Home environment	Concept-Housing Aspects-Does it get proper sunlight? Is it ventilated? Is it kept clean, both in & around? Is it exposed to loud noise?	Visit minimum 5 houses of rural & urban & observe-ventilation, sanitation, waste disposal?	Objective- 1. Suggest ways of providing adequate lighting & ventilation, relate effect of poor lighting & ventilation to ill health, ways of maintaining sanitary. 2. Conditions safe disposable waste.			
3.	“	Care & maintenance	Approach-general, daily, weekly, seasonal	How to clean house their different parts of house?	Values-			
4.	“	Cleaning Different Surfaces	Terms – Floor , Ceramic tiles, Plastic , Glass mirrors , Metal tabs	Clean home toilet & seating room	To know how to use tools for cleaning			
5	Housing	Space Organization	Cooking , Dining , Sleeping , Bathing , Storing	Decorate house walls, floors, etc.	1.To know Arrangement of furniture, 2. Know how to utilize free space	PPT		
6		Home Decoration	Walls , Flowers and potted plants, Floor decoration	“				